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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,777	09/06/2006	Tony Whittaker	WW/3-22355/A/PCT	4484
324	7590	07/29/2009		
JoAnn Villamizar Ciba Corporation/Patent Department 540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591				
EXAMINER				
HRUSKOCI, PETER A				
ART UNIT		PAPER NUMBER		
1797				
NOTIFICATION DATE		DELIVERY MODE		
07/20/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/591,777

**Applicant(s)**

WHITTAKER ET AL.

**Examiner**

/Peter A. Hruskoci/

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/4/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/55/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Claims 9, 10, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 9 “0.5dl/g”, in claim 10 “4 and 10 dl/g”, “1 dl/g” and “0.5 dl/g”, and in claim 17 “4 and 10 dl/g”, appear to be misdescriptive because the Brookfield viscosity recited in claim 1 would appear to have larger intrinsic viscosities.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorensen et al. 5,846,433 in view of Stevenson 5,370,800 and Takaki et al. 5,292,821. Sorensen et al. (see col. 7 line 3 through col. 8 line 17) disclose a process of dewatering an aqueous suspension substantially as claimed. The claims differ from Sorensen et al. by reciting that the process includes thickening the flocculated suspension, and adding a second flocculant which is a polymer having a specific Brookfield viscosity. Stevenson discloses (see col. 1 line 68 through col. 2 line 40) that it is known in the art to mix waste water with a first flocculating polymer, remove water from floccules in a thickener, mix a second flocculating polymer with the floccules, and dewater the floccules in a filter press. Takaki et al. appears to disclose (see col. 5 line 50 through col. 11 line 14) that it is known in the art to utilize a polymer having the recited Brookfield viscosity, to aid in flocculating sludge suspensions. It would have been obvious to one skilled in the art to modify the process of Sorensen et al. by utilizing the recited thickening and polymer in view of the teachings of Stevenson and Takaki et al., to aid in flocculating and

dewatering the suspension. The specific viscosity and second flocculants utilized, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific suspension treated and results desired, absent a sufficient showing of unexpected results.

Claims 4, 13, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorensen et al. 5,846,433 in view Stevenson 5,370,800 and Takaki et al. 5,292,821 as above, and further in view of Ghafoor et al. 6,001,920. The claims differ from the references as applied above by reciting the second flocculant has a specific polymer concentration by weight, and the first and second flocculant are added simultaneously or combined into a single composition. Ghafoor et al. disclose (see col. 1 line 16 through col. 6 line 36) that it is known in the art to utilize a flocculant composition having a concentration of 5% by weight including first and second polymer coagulants or flocculants, to aid in flocculating sludge suspensions. It would have been obvious to one skilled in the art to modify the references as applied above, by utilizing the recited concentration and composition in view of the teachings of Ghafoor et al., to aid in flocculating and dewatering the suspension. The specific concentration utilized, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific sludge treated and results desired, absent a sufficient showing of unexpected results.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takaki et al. 5,292,821. Takaki et al. disclose (see col. 5 line 50 through col. 11 line 14) a process for dewatering an aqueous suspension substantially as claimed. The claim differs from Takaki et al. Sorensen et al. by reciting the aqueous flocculant composition comprises a polymer having a specific Brookfield viscosity. It is submitted that the viscosity of the cationic polyacrylamides utilized in Takaki et al. is considered patentably indistinguishable from the polymer recited in the

instant claim. It would have been obvious to one skilled in the art to modify the process of Takaki et al. by utilizing the recited polymer, to aid in flocculating and dewatering the suspension. The specific viscosity utilized, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific sludge treated and results desired, absent a sufficient showing of unexpected results.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of copending Application No. 10/591,776. Although the conflicting claims are not identical, they are not patentably distinct from each other because the process steps recited in the instant claims appear to be fully encompassed by the process steps recited in the claims of the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

With regard to applicants' arguments concerning the above 35 USC 112 rejection applied above, it is unclear how the intrinsic viscosity of the second flocculant recited in the above claims further limits the Brookfield viscosity of the second flocculant. It would appear that a polymer having an intrinsic viscosity of 0.5 dl/g as recited in claim 9 would have a Brookfield viscosity less than 40,000 cps as recited in claim 1. Furthermore, applicants have not presented sufficient factual evidence to support the above arguments.

Applicants argue that Sorensen et al. does not disclose a first flocculant but only a coagulant to be added first, and further does not disclose a thickening step between two additives. It is submitted that the polymeric coagulants having an intrinsic viscosity of 2-3 dl/g as disclosed in Sorensen et al. are considered patentably indistinguishable from the first flocculant as recited in the instant claims. It is further noted that Stevenson et al. as applied above, that it is known in the art to mix waste water or an aqueous suspension with a first flocculating polymer, remove water from floccules in a thickener, mix a second flocculating polymer with the floccules, and dewater the floccules by mechanically dewatering in a filter press as recited in the instant claims.

Applicants allege that Takaki et al. do not disclose addition to the papermaking stock (suspension) of a polymer that has a Brookfield viscosity of at least 40,000 cp as recited in claim 1. It is submitted that the teachings of Takaki et al. (see cols. 5 and 6) include polymers in a range of 100-100,000 cps in a 10% aqueous solution. It is further noted that Takaki et al. disclose (see col. 9) that the polymers can be used in a solution diluted to 10% by weight.

Furthermore, applicants have not presented sufficient factual evidence to support the above allegation.

Applicants argue that the composition of Ghafoor et al. must have a Brookfield viscosity of less than 30,000 cps, and there would be no reason why the skilled person would choose to provide a process in which the second flocculant would have a Brookfield viscosity of at least 40,000 cps. It is submitted that Takaki et al. appear to disclose the use of polymers having Brookfield viscosities of about 100,000 cps, to aid in flocculating and dewatering aqueous suspensions. Furthermore, applicants have not presented sufficient comparative evidence with the above prior art, to support the above argument.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Peter A. Hruskoci/ whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter A. Hruskoci/  
Primary Examiner  
Art Unit 1797

7/15/09